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AUTHOR Roweton, William E.; Bare, Charles
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ABSTRACT

This study used high school data from Phi Delta Kappa's 1988-1989 nationwide "Study of Students at Risk" to examine and compare administrator, teacher, and student attitudes, characteristics, and perceptions in 77 high schools sorted according to high and low holding power statistics (HPS). Data from 7,100 10th graders, principals, and teachers revealed that rural and small town schools graduated proportionally more students than suburban or inner city schools; and that HPS correlated negatively with school size. Results of multiple regression analysis revealed that knowing how often students were retained in grade, the principal's estimate of student alcohol abuse, and the teacher's evaluation of his or her own efforts with students at-risk predicted 48% of HPS variance. (TE)

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Profiling high schools with high/low "holding power":

A comparative study

William E. Roweton and Charles Bare

Chadron State College

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Problem statement

Administrator, teacher, and student attitudes, characteristics and perceptions from high schools with high/low holding power statistics (HPS's) were compared. Furthermore, the HPS was correlated with school size and rural/urban community characteristics. We were especially interested in the relationship between high school "ruralness" and HPS.

Three (3) research hypotheses were tested:

(1) type of community [rural; small town/village; suburban; or urban/inner city] correlates negatively with HPS (e.g., rural high schools graduate proportionally more students);

(2) HPS correlates negatively with high school size; and

(3) high schools with high/low HPS differ on selected administrator, community, school, student, and teacher attitudes, characteristics, and perceptions.

Theoretical perspective

Many studies have identified factors (e.g., Baro, 1987; "Dropout prevention," 1986) or intervention models (e.g., "Prototype Occupational Choice Model," 1981) associated with high school dropout rates in suburban and urban communities. Relatively few studies have examined school holding power in rural America (Beyer & Smey-Richman, 1987; Brown, 1985; Elliott, 1987; Jess,

1988; Lamm, et al., 1986; Young, 1986). Perhaps, no study has addressed rural/urban patterns vis-a-vis high/low HPS's in the same dataset.

The present study utilized high school data from Phi Delta Kappa's (PDK) 1988-1989 nationwide investigation, "A Study of Students at Risk."

This comprehensive study surveyed administrators and teachers from elementary, middle, and high schools and sampled biographical data characterizing their fourth, seventh, and tenth grade students.

Children who are at risk are a divergent lot (see Barber, Carriedo, Denton, Frymier, Gansneder, Johnston-Lewis, & Robertson, 1988). For PDK, children who contemplate or attempt suicide or who are abused--sexually, physically, or emotionally--are at risk. Children who engage in sexual behavior, use drugs, or drink alcohol are at risk. Children who peddle drugs, harass older citizens, steal cars, or rob stores are at risk. And, of course, children who miss school, fail to attend, or do not achieve academically are also at risk.

Method

In the summer of 1988, 100 PDK chapters from across the US were asked to sponsor research teams to collect data on students in grades 4, 7, and 10, and their affiliated communities, principals, schools, and teachers.

Subjects.--Following a national training session in October, 1988, ninety (90) chapters actually collected data (see "Data," 1989) on . .

> 48,000 students and from about 10,000 teachers and 270 principals. Data also were collected from teachers and guidance counselors on 22,018 students in grades four, seven, and 10 to determine which students may be at risk; and information was collected on 25,510 high school students who entered ninth grade in 1984 to determine the "holding power" of the schools." ("Data," 1989)

The present study utilized data from 7100 tenth grade students, dozens of high school principals, and hundreds of high school classroom teachers from seventy seven (77) secondary schools. An HPS was calculated for each high school.

Data was selectively utilized from a paper-and-pencil high school teacher survey, from a three-hour semi-structured interview of high school principals, and from extensive high school student profiles as compiled by individual research teams, i.e. PDK chapter volunteers. Selected variables were correlated to the HPS.

A holding power statistic (HPS)--the inverse of the traditional school dropout rate--equaled the total number of students who graduated in 1988 (plus those who graduated early or who are still enrolled) divided by the total number of ninth-grade

enrollees in 1984 (minus those who transferred, were jailed or who died prior to 1988). The HPS values could range from 0% to 100%.

Results

Analyses of the present study's sample of 77 high schools indicted that the HPS ranged for 37% to 100%, with an average across community types of 82% (sd = 12%).

Hypothesis 1.--According to student profile data, community classification [(1) rural; (2) small town/city; (3) suburb; (4) urban/inner city] negatively correlated with HPS (r = -.29, p .01). A more sensitive weighted-averages approach to community types yielded a similar relationship to high school holding power (r = -.26, p .01). Community classifications based upon the principal interviews also correlated negatively with HPS (r = -.13) but did not reach statistical significance.

In the main, both principals (in their interviews) and research teams (from student data protocols) independently classified high school communities as rural, small town/city, suburban, or inner city/urban similarly, but their classifications did not coincide perfectly (r = .72, p .01).

Hypothesis 2.--The HPS and high school size (average principal's estimate for 1980-1988) correlated negatively (r = -.29, p .01).

Hypothesis 3.--Profiling high schools with high/low HPS's yielded a complex array of results.

Tenth grade students from high schools with above average HPS's (e.g., low dropout rates) are retained less often (t = 3.87, p .05), received higher grades (t = -2.32, p .05), are absent fewer times (t = 2.18, p .05), change schools less frequently (t = 3.52, p .05), score higher on reading tests (t = -2.03, p .05), and are less likely to have failed a course (t = 2.73, p .05) or to be involved with crime (t = 3.05, p .05), drug abuse (t = 2.27, p .05), or with families with greater problems (t = 2.37, p .05) or instability (t = 2.55, p .05).

High schools with above average HPS's are smaller (t = 2.20, p .05) and more likely to be located in sparsely populated (e.g., rural) communities (t = 2.21, p .05).

High/low HPS high schools do not differ statistically on the percentage of black, Hispanic, or white students or the relative proportion of professional parents. Furthermore, high/low HPS high schools do not differ on the time teachers spend with at-risk students, student self-esteem, student abuse of alcohol, or average class size.

Multiple regression.--Knowing (1) how often students are retained in grade, (2) the principal's estimate of student alcohol abuse, and (3) the teacher's evaluation of their own efforts with students at-risk predicted 48% of HPS variance.

Conclusions

The three research hypotheses were confirmed. Size of the community and the high school negatively predicted HPS, that is,

smaller high schools, as in rural communities, had the highest holding power. An item-by-item profile across the data sources resisted simple summarization. Indeed, predicting at-risk vulnerability or causally linking student, school, and community characteristics with HPS levels remains a complex puzzle.

Furthermore, major social divisions--such as rural and urban --may predestine a different "assortment" of determinants. Life in a rural high school (Elliott, 1987) for a student at-risk may be quite distinctive; rural high schools were invariably associated with above average HPS's.

Ruralness (i.e., smallness) may justify quite different students-at-risk interventions. A useful empirical response may await a further analyses of this dataset.

References

Barber, L., Carriedo, R., Denton, W., Frymier, J., Gansneder, B., Johnson-Lewis, S., & Robertson, N. (1988). Manual of instructions for "A study of students at risk." Bloomington, IN: Phi Delta Kappan.

Barro, S. M., & Kolstad, A. (1987). Who drops out of high school? Findings from high school and beyond. Contractor report. ERIC, ED 284 134.

Beyer, F. S., & Smey-Richman, B. (1988 April 5-9). Addressing the at-risk challenge in the nonurban setting. Paper presented at the Annual Meeting of the American Educational Research Association, New Orleans. [ERIC, ED 297 910]

Brown, D. E. (1985). Higher education students from rural communities: A report on dropping out. ERIC, ED 258 771.

Data are collected for chapter research project. (1989, Spring). News, notes, and quotes, 33 (3), 6.

Dropout prevention. (1986). Urban Principals Network News, 17 pp. [ERIC, ED 281 931]

Elliott, J. (1987 February 4-7). Rural students at risk. Paper presented at the Annual Success for Students At-Risk Conference, Chicago. [ERIC, ED 285 708]

Gastright, J. F. (1989, April). Don't base your dropout program on somebody else's problem. Research Bulletin, Phi Delta Kappa, Center for Evaluation, Development and Research, 1-4.

Jess, J. D. (1988 March 16). Rural education: A different kind of politics. A local school perspective. Paper presented at Rural education: The search for solutions, the Pioneer Hi-Bred International Conference, Des Moines. [ERIC, ED 296 858]

Lamm, C., et al. (1986). Would you like to swing on a star? Opportunities to improve education in Kentucky's fifth congressional district. A report to the Shakertown Roundtable Conference on Economic Development and Education in Kentucky's Fifth Congressional District. ERIC, ED 288 691.

A prototypical occupations choice model for disadvantaged youth in rural schools: A final report. (1981). ERIC, ED 234 177.

Young, G. (1986). Meeting students' needs with an eight-period day. Rural Educator, 8 (1), 22-25.